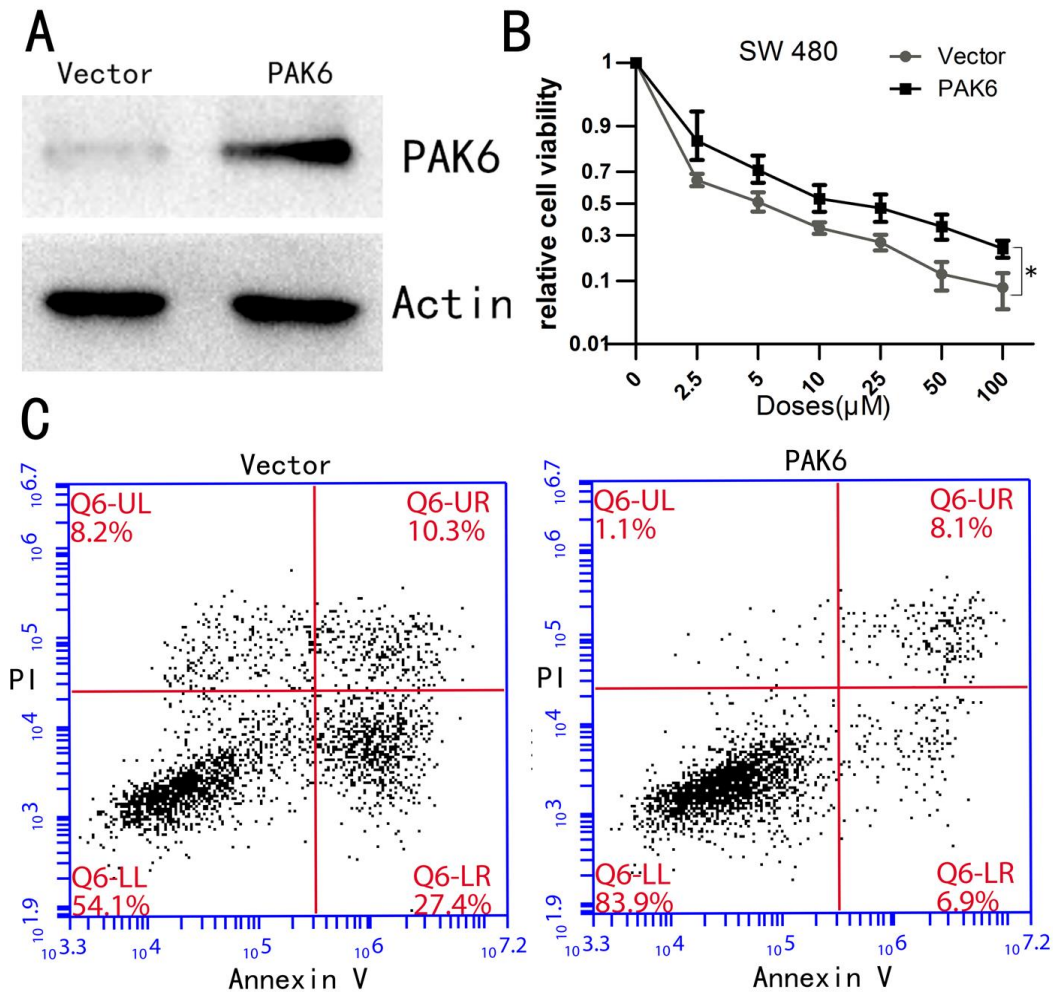
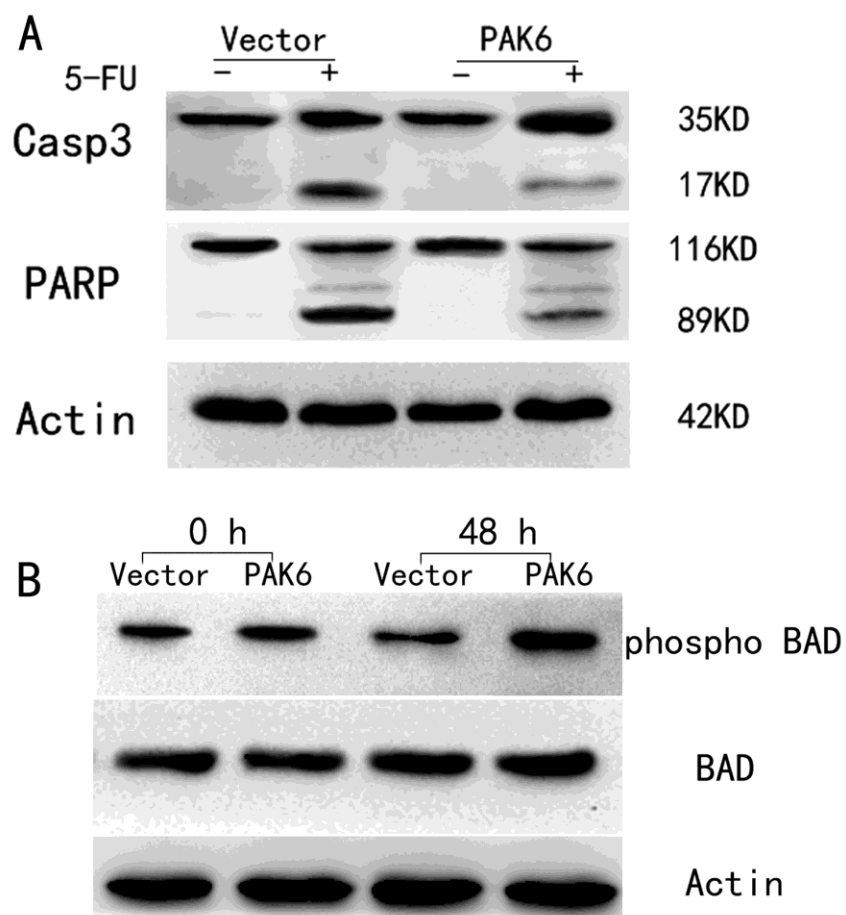


PAK6 increase chemoresistance and is a prognostic marker for stage II and III colon cancer patients undergoing 5-FU based chemotherapy

Supplementary Material



Supplementary figure 1: Cell viability and cell apoptosis in PAK6 overexpressed SW480 cells. A: SW480 cells were overexpressed with PAK6. B: SW480 were treated with 5-FU for 48h, SW480/ vector IC₅₀ = $5.19 \pm 0.02 \mu$ M, SW480/ PAK6 IC₅₀ = $18.23 \pm 0.04 \mu$ M (* $P < 0.05$). C: the apoptosis rate of SW480/ PAK6 is significantly less than the SW480/ vector control (SW480/ vector = 27.38 ± 0.86 , SW480/ PAK6 = 7.69 ± 0.14 , $P < 0.05$).



Supplement figure 2: Changes of apoptosis-related molecules after a 48-h treatment with 10 uM 5-FU in SW480. A: Western blot analysis showed that caspase 3 and PARP were less cleaved in PAK6-overexpressed SW480 cell lines. B: Phosphorylated BAD (p-BAD) was increased in PAK6-overexpressed SW480 cells.

Supplement table 1: Percentage of cells in each phase presented.

treatment	shNT		ShNT+5-FU		shKD		ShKD+5-FU	
Cell type	HCT8	HCT116	HCT8	HCT116	HCT8	HCT116	HCT8	HCT116
Sub-G0/G1	0	0	0.20±0.03	0.53±0.07*	0	0.37±0.09*	6.40±0.06*	7.57±0.37*
G0/G1	72.97±0.20	76.27±0.52	58.40±0.23*	59.40±0.1*	61.1±0.15*	60.13±0.03*	32.57±0.15*	34.4±0.51*
S	16.07±0.20	12.2±0.27	25.60±0.17*	24.00±0.27*	14.00±0.12	18.13±0.20	18.63±0.13	18.93±0.20
G2/M	10.97±0.03	11.43±0.29	15.67±0.03	16.07±0.13	24.90±0.06*	21.37±0.09*	42.40±0.12*	39.1±0.06*

*P < 0.05 indicates a significant difference compared with shNT group.